

## California State Fire Marshal CODE INTERPRETATION

| Date Issued     | 10-21-03   | Interpretation # | 03-041 |
|-----------------|--|------------------|--------|
| Topic           | Smoke Alarms/Detectors in Group R, Division 3 Occupancies  |                  |        |
| Code Section(s) | §2-3.5.1, NFPA 72 (1999 ed)  |                  |        |
| Requested by    | Thomas W. Smithey, Sr Building Inspector Contra Costa County Building Department 651 Pine St., 3 <sup>rd</sup> Floor, North Wing Martinez, CA 94553-1295 |                  |        |

What is the clearance required between smoke alarms (and smoke detectors) and return air grills in Group R, Division 3 occupancies?

The minimum required clearance is three feet. §2-3.5.1 states that smoke detectors shall not be located where airflow prevents operation of the units. Appendix §A-2.3.5.1. recommends that smoke detectors not be located in direct airflow or closer than three feet from an air supply diffuser or return air openings. However, the commentary on Section A-2.3.5.1 found in the 1999 edition of the National Fire Alarm Code Handbook states that there may be circumstances where a separation of three feet is not adequate and a greater separation is required depending upon the HVC velocity and type of diffusers.